

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims, including those in the First Preliminary Amendment, in the application:

Listing of Claims:

Claim 1 (currently amended): A ~~copper alloy~~ sputtering target, comprising a copper alloy sputtering target containing 0.01 to ~~(less than)~~ less than 0.5wt% of at least ~~± one~~ one element selected from Al ~~or~~ and Sn, and containing ~~either~~ at least one of Mn ~~or~~ and Si ~~or both~~ in a total amount of 0.25wtppm or less.

Claims 2-15 (canceled).

Claim 16 (new): A sputtering target according to claim 1, wherein said copper alloy sputtering target contains 0.05 to 0.2wt% of said at least one element selected from Al and Sn.

Claim 17 (new): A sputtering target according to claim 16, wherein said copper alloy sputtering target contains at least one element selected from the group consisting of Sb, Zr, Ti, Cr, Ag, Au, Cd, In and As in a total amount of 0.3wtppm or less.

Claim 18 (new): A sputtering target according to claim 17, wherein inevitable impurities, excluding gas components, in said copper alloy sputtering target are 1wtppm or less.

Claim 19 (new): A sputtering target according to claim 1, wherein said copper alloy sputtering target contains at least one element selected from the group consisting of Sb, Zr, Ti, Cr, Ag, Au, Cd, In and As in a total amount of 1.0wtppm or less.

Claim 20 (new): A sputtering target according to claim 19, wherein said total amount of said at least one element selected from the group consisting of Sb, Zr, Ti, Cr, Ag, Au, Cd, In and As is 0.5wtppm or less.

Claim 21 (new): A sputtering target according to claim 20, wherein said total amount of said at least one element selected from the group consisting of Sb, Zr, Ti, Cr, Ag, Au, Cd, In and As is 0.3wtppm or less.

Claim 22 (new): A sputtering target according to claim 1, wherein inevitable impurities, excluding gas components, in said copper alloy sputtering target are 10wtppm or less.

Claim 23 (new): A sputtering target according to claim 22, wherein said inevitable impurities, excluding gas components, are 1wtppm or less.

Claim 24 (new): A sputtering target according to claim 1, wherein said copper alloy sputtering target contains 0.05wtppm or less of Na and K, respectively; wherein said copper alloy sputtering target contains 1wtppb or less of U and Th, respectively; and wherein said copper alloy sputtering target contains 5wtppm or less of oxygen, 2wtppm or less of nitrogen, and 2wtppm or less of carbon.

Claim 25 (new): A sputtering target according to claim 1, wherein said copper alloy sputtering target contains 0.02wtppm or less of Na and K, respectively; wherein said copper alloy sputtering target contains 0.5wtppb or less of U and Th, respectively; and wherein said copper alloy sputtering target contains 1wtppm or less of oxygen, 1wtppm or less of nitrogen, and 1wtppm or less of carbon.

Claim 26 (new): A sputtering target according to claim 1, wherein said copper alloy sputtering target has an average crystal grain size of $100\mu\text{m}$ or less and an average grain size variation within $\pm 20\%$.

Claim 27 (new): Semiconductor element wiring prepared by a process comprising the step of sputtering a film from a copper alloy sputtering target containing 0.01 to less than 0.5wt% of at least one element selected from Al and Sn, and containing at least one of Mn and Si in a total amount of 0.25wtppm or less.

Claim 28 (new): Semiconductor element wiring according to claim 27, wherein said film is formed as a semiconductor element wiring seed layer.

Claim 29 (new): Semiconductor element wiring according to claim 28, wherein said semiconductor wiring seed layer is formed on a barrier film of Ta, Ta alloy, or a nitride thereof.

Claim 30 (new): Semiconductor element wiring according to claim 27, wherein said copper alloy sputtering target contains at least one element selected from the group consisting of Sb, Zr, Ti, Cr, Ag, Au, Cd, In and As in a total amount of 1.0wtppm or less.

Claim 31 (new): Semiconductor element wiring according to claim 30, wherein said film is formed as a semiconductor element wiring seed layer.

Claim 32 (new): Semiconductor element wiring according to claim 31, wherein said semiconductor wiring seed layer is formed on a barrier film of Ta, Ta alloy, or a nitride thereof.

Claim 33 (new): A method of manufacturing a copper alloy sputtering target, comprising the step of preparing a copper mother alloy, melting the mother alloy in molten copper and forming an ingot therefrom, and forming a target from the ingot to produce a copper alloy sputtering target containing 0.01 to less than 0.5wt% of at least one element selected from Al and Sn, and containing at least one of Mn and Si in a total amount of 0.25wtppm or less.

Claim 34 (new): A method according to claim 33, wherein the mother alloy is prepared within a solid solubility limit.